

Applying the Kano model to explore the service quality needs of R department store

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ABSTRACT : The department store market is gradually reaching saturation, and it is necessary to grasp customer needs to attract more customers to come and spend. This study applied Kano model analysis and found that three items can both highly increase customer satisfaction and highly reduce customer dissatisfaction: They are that employees can quickly respond to customer needs (Item 1); internal facility routes and guidance notices are clear (Item 6); product prices are marked (Item 18). R department stores can improve these items to increase customer satisfaction and revenue.

KEYWORDS- department store, Kano model, service quality

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I. INTRODUCTION

Competition in department stores is fierce, and operators must understand customer needs to obtain better revenue. This study is divided into responsiveness, tangibility, reliability, caring, and assurance based on Parasuraman et al.'s (1988) measurement dimensions. Based on questionnaire analysis, we look for "efficiency-improving service quality attributes" that can simultaneously increase customer satisfaction and reduce customer dissatisfaction. Assist R department store to identify priorities for service quality improvement, enhancing competitiveness.

II. LITERATURE REVIEW

The literature discussion mainly includes two parts, namely service quality and the Kano two-dimensional quality model.

2.1 Service Quality

Parasuraman et al. (1988) proposed that service quality consists of five dimensions: Reliability, Responsiveness, Empathy, and Tangibles. This study divides the measurement dimensions of service quality into five dimensions based on Parasuraman et al. (1988). The items for measuring service quality are referenced from questionnaires by Chung and Tsai (2020), Antony et al. (2004), Chung & Chen (2015), Ugboma et al. (2007), and Parasuraman et al. (1988), and modified according to the service characteristics of department stores.

2.2 Kano model

Kano et al. (1984) proposed the Kano two-dimensional quality attribute model, which categorizes quality attributes into five groups as listed in Table 1. The Kano questionnaire is a survey to understand customers' cognitive feelings about quality items when they are present and not present. Matzler and Hinterhuber (1998) proposed the customer satisfaction coefficient and the coefficient calculation formula is as follows:

C(1): Increase customer satisfaction coefficient = $(A+O)/(A+O+M+I)$

C(2): Reduce customer dissatisfaction coefficient = $(O+M)/(A+O+M+I) \times (-1)$

A : Attractive Quality ; O : One-Dimensional Quality ; M : Must-Be Quality ; I : Indifferent Quality ;

III. RESEARCH METHOD

Kano et al. (1984) proposed the Kano two-dimensional quality attribute model, which categorizes quality attributes into five groups as listed in Table 1. According to Table 1, the classification of each quality attribute can be determined. The measurement items of service quality in this study were referenced from questionnaires by Antony et al. (2004), Chung and Tsai (2020), Ugboma et al. (2007), and Parasuraman et al. (1988), which were modified to suit the operational characteristics of department stores. The subjects of this study were customers of Company R department store, and 34 questionnaires were collected from April 1st to April 30th, 2024. The variables measured include 1. Responsiveness Content includes Employees who can respond quickly to customer needs (Item1); Employees who provide detailed explanations (Item2); Staff who are willing to assist and serve customers (Item3). 2. Tangibles Content includes Employees maintaining clean attire and appearance (Item4); Internal facilities have modern and professional equipment (Item 5); Internal facility layout and signage are clear (Item6); Service facilities meet customer needs (Item 7). 3. Reliability Content includes Employees make an effort to assist customers with problem-solving (Item8); Employees fulfill commitments to customers accurately (Item9); Employees get things right the first time (Item10). (4) Empathy: Content includes: Employees actively showing individual care to customers (Item11); Employees prioritizing the interests of customers (Item12); Employees understanding individual customer needs (Item13); Workplace understanding customer needs and providing necessary services (Item14). (5) Assurance: Content includes: Having sufficient professional knowledge to respond to customer inquiries (Item15); Providing services and products of high quality (Item16); Employees being able to provide responsible service (Item17); Clear pricing of goods (Item18).

IV. RESEARCH RESULTS

This study utilizes Matzler and Hinterhuber's (1998) two-dimensional classification of quality elements and the calculation method of "customer satisfaction coefficient" to identify benefit improvement service quality items that can simultaneously increase customer satisfaction and reduce customer dissatisfaction (as shown in Table 2). Among them, 13 items are classified as attractive quality, and 5 items are classified as one-dimensional quality (as shown in Table 2). The items that can significantly increase customer satisfaction and reduce customer dissatisfaction include items one, six, and eighteen. The results of this analysis can help identify improvement priorities.

V. CONCLUSION

This study takes R department store customers as the research object and uses Kano's two-dimensional quality model to identify "efficiency improvement service quality projects" and provide operators with business strategies to improve service quality. This study found that three items can both highly increase customer satisfaction and highly reduce customer dissatisfaction: employees can respond quickly to customer needs (Item 1); internal facility routes and guidance notices are clear (Item 6); product price tags are Clear (Item 18). Department stores target these improvements to improve customer satisfaction and increase revenue.

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Table 1: Two-dimensional quality attributes classification

Functional	Dysfunctional				
	Like	Must-be	Neutral	Live with	Dislike
Like	Q	A	A	A	O
Must-be	R	I	I	I	M
Neutral	R	I	I	I	M
Live with	R	I	I	I	M
Dislike	R	R	R	R	Q

Table2 Customer satisfaction coefficient table

Item	A	O	M	I	R	Q	Category	C(1)	C(2)
1	0	12	1	7	1	3	O	※0.7333	※-0.4333
2	12	7	3	6	3	3	A	0.6786	-0.3571
3	10	7	3	8	2	4	A	0.6071	-0.3571
4	8	7	2	10	3	4	A	0.5556	-0.3333
5	15	5	0	7	1	6	A	※0.7407	-0.1852
6	9	13	3	5	1	3	O	※0.7333	※-0.5333
7	14	9	2	5	1	3	A	※0.7667	-0.3667
8	11	9	1	7	1	5	A	※0.7143	-0.3571
9	8	11	1	8	1	5	O	0.6786	※-0.4286
10	15	6	1	6	2	4	A	※0.75	-0.25
11	10	6	2	10	1	5	A	0.5714	-0.2857
12	14	7	3	6	1	3	A	※0.7	-0.3333
13	13	8	1	8	0	4	A	※0.7	-0.3
14	14	7	0	7	1	5	A	※0.75	-0.25
15	11	8	3	8	1	3	A	0.6333	-0.3667
16	9	11	4	6	0	4	O	0.6667	-0.5
17	10	7	3	9	2	3	A	0.5862	-0.3448
18	5	18	1	5	2	3	O	※0.7931	※-0.6552
Average								0.6866	-0.3687

Note: A : Attractive Quality ; O : One-Dimensional Quality ; M : Must-Be Quality ; I : Indifferent Quality ;

R : Reverse Quality

C(1): Increase customer satisfaction coefficient;

C(2): Decrease customer dissatisfaction coefficient.

※The absolute value of the coefficient is greater than the absolute value of the average coefficient.